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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,956	04/18/2005	Norimichi Uchida	Q83957	3010

23373 7590 11/16/2005  
SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER
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THOMAS, COURTNEY D

ART UNIT	PAPER NUMBER
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2882

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/509,956

Applicant(s)

UCHIDA ET AL.

Examiner

Courtney Thomas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2004.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-13 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. **Claims 9-13** are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from other multiple dependent claims. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

2. **Claims 1, 4, 6, 8, 10, 11 and 13** are objected to for minor informalities. Examiner suggests the following revisions to avoid antecedent basis problems and/or to clarify claim language.

In claim 1, line 3, “the conveyed tire” should be replaced by --a conveyed tire--

In claim 1, line 6, “ends of the tires” should be replaced by --ends of the tire--

In claim 4, line 7, “this” should be replaced by --this.--

In claim 6, line 2, “means of conveying” should be replaced by --means for conveying--

In claim 6, line 2, “means of applying” should be replaced by --means for applying--

In claim 6, line 9, “the conveyed tire.” should be replaced by --the conveyed tire, including the opposite ends of the conveyed tire.--

In claim 8, line 2, “means of measuring” should be replaced by --means for measuring--

In claim 8, lines 3-4, “means of moving” should be replaced by --means for moving--

In claim 10, lines 3-4, “X-ray sensor for taking a application means” should be replaced by --X-ray sensor for taking transmission X-ray images--

In claim 10, line 6, “the tire conveyance” should be replaced by --a tire conveyance--

In claim 10, line 7, “distance” should be replaced by --direction--

In claim 11, line 5, “the internal direction” should be replaced by --an internal direction--

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In claim 11, line 6, "the center portion" should be replaced by --a center portion--

In claim 11, line 6, "the extending" should be replaced by --an extending--

In claim 13, line 2, "the interval" should be replaced by --an interval--

3. The claims have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the claims.

4. Appropriate correction is required.

***Allowable Subject Matter***

5. Claims 1-13 are allowed.

6. The following is a statement of reasons for the indication of allowable subject matter:

7. **As per claim 1 and dependent claims 2-5**, the examiner found no reference in the prior art that disclosed or made obvious a method of inspecting the interior of a tire, comprising the step of applying an X-ray to at least two positions, including opposite ends of a tire to take a transmission X-ray image of the tire, as recited in independent claim 1.

8. **As per claim 6 and dependent claims 7-13**, the examiner found no reference in the prior art that disclosed or made obvious an X-ray tire inspection apparatus comprising means for applying an X-ray, wherein the X-ray application means are installed at positions corresponding to at least two positions of a conveyed tire, including the opposite ends of the conveyed tire, as recited in independent claim 6.

***Conclusion***

9. This application is in condition for allowance except for the following formal matters:  
as noted above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

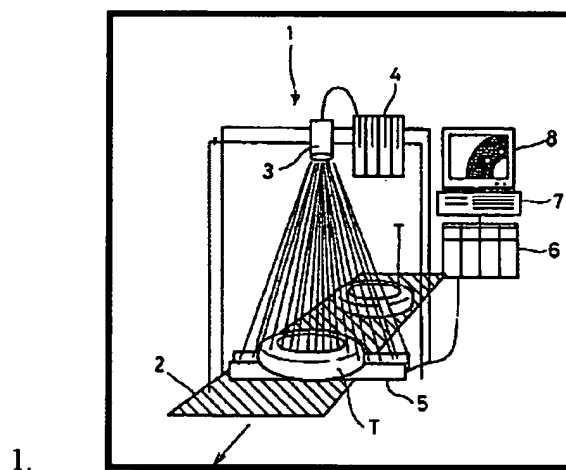


Figure 1- Tire Inspection Apparatus – U.S. Patent 6,327,333 to Uchida et al.

U.S. Patent 6,327,333 to Uchida et al. discloses an X-ray Tire Inspection apparatus (and corresponding method) comprising: a conveying means (2) and an X-ray application means (3). The aforementioned reference fails to disclose or make obvious an apparatus comprising X-ray application means installed at positions corresponding to at least two positions of a conveyed tire (T), including the opposite ends of the conveyed tire. Examiner notes the inventive entity of instant application 10/509,956 is the same as that of U.S. Patent 6,327,333.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Courtney Thomas whose telephone number is (571) 272-2496. The examiner can normally be reached on M - F (9 am - 5 pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571) 272 2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Courtney Thomas *CT*  
Examiner  
Art Unit 2882



**EDWARD J. GLICK**  
**SUPERVISORY PATENT EXAMINER**